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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,889	03/31/2000	Yoshiaki Takabatake	040301/0597	4179

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EXAMINER

VOLPER, THOMAS E

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/541,889

Applicant(s)

TAKABATAKE ET AL.

Examiner

Thomas Volper

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 25, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 25, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The Proprietary IDS filed 1 June 2000 has been considered, and the information contained therein found not to be reasonably important to the Examiner.

Claim Objections

2. Claims 25 and 36 are objected to because of the following informalities: "the third networks" in lines 18-19 of claim 25, and line 17 of claim 36, should be changed to --the third network--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 25 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 25 and 36 in lines 28-34 and lines 27-33, respectively, recite "transferring a control information received from the first terminal device through the first network" from the third device to the second device. According to the claims, however, the first device only has reception function with respect to the first network. Thus, it would be impossible for the first terminal device to transmit anything over the first network to the third device. It is suggested to

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change "the first network" in the recitation above to --the second network--, since there is a basis for this limitation in the claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US 6,484,028) in view of Boer et al. (US 5,706,428).

Regarding claims 1 and 35, Okada discloses a configuration wherein a device (1 terminal) can request a transmission from a user center (3 center), representing the second terminal of the present invention, via an in-house intranet (2), representing the second network of the present invention, so that the user center may deliver the requested transmission via a satellite-communication system, (col. 14, lines 44-61; see also Figure 3). The satellite-communication system may be used as a high-speed, low cost method to send moving picture data such as MPEG data, which cannot be sent over the intranet (col. 8, lines 50-59). Okada fails to expressly disclose a faster IEEE 802.11 standard network, and also fails to disclose that the intranet is a radio network. Boer discloses an IEEE 802.11 wireless LAN that discloses mobile stations that may transmit and receive at a plurality of data rates, including higher rates that are not yet in accordance with the standard (col. 1, lines 9-30 and col. 2, lines 34-53). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to

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implement an IEEE 802.11 standard network in place of the satellite-communication system and intranet in the architecture provided Okada wherein the device (1 terminal) would receive high speed data at one rate, and communicate with the user center for requesting the high speed data at another lower rate. One of ordinary skill in the art would have been motivated to implement the intranet of Okada with an IEEE 802.11 wireless LAN to obviate the need for cumbersome wired cabling. One of ordinary skill in the art would have been motivated to replace the satellite-communication system with a high-speed wireless LAN in order to deliver high-bandwidth data to a terminal disposed in an IEEE 802.11 network in anticipation of the standard incorporating higher data rates in the future.

Regarding claim 2, Okada discloses a unidirectional downlink comprising the first network (col. 5, line 62 – col. 6, line 3; see also Figure 3).

Regarding claim 3, Okada fails to expressly disclose that packets are transmitted directly from a source terminal to the first terminal device through the first network. In the paragraph above regarding claims 1 and 35, it was deemed obvious to implement an IEEE 802.11 wireless LAN, as in Boer, in place of the satellite network of Okada. In Figure 1 of Boer, the mobile stations may receive data directly from the access point (12), which represents a source.

Regarding claims 4 and 5, Okada discloses a source terminal (terminal 5 of Figure 3) and a third network (Internet 4). Okada discloses notifying a source terminal to transmit packets to the first terminal via the second terminal (user center 3) on the third and first networks (col. 5, line 62 – col. 7, line 67).

Regarding claims 6 and 7, Okada discloses that the terminal (1) gives a network address as a destination in a request for transmission to the user center (col. 7, lines 53-61). This

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represents the control information of the present invention. Okada fails to expressly disclose that this information is contained in a MAC layer, or in an upper layer of a MAC layer. The system provided thus far by the combination of Okada et al. in view of Boer et al. teaches that it would have been obvious to use an IEEE 802.11 network as the in-house intranet (2), which represents the second network of the present invention. In addition, it is well known in the art that IEEE 802.11 is a protocol supporting communication between MAC devices. It is also well known that MAC frames include source and destination addresses that may be in an upper layer of the MAC layer. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art that the network address supplied in the transmission request by the terminal (1) would be a MAC address in a MAC layer if the request were made in the system provided by the combination of Okada et al. in view of Boer et al. described in regards to claims 1 and 35. One of ordinary skill in the art would have been motivated to do this so that the user center (3) would be able to attach the necessary information to data being transferred via the faster uni-directional network to assure the data would arrive at the correct destination.

Allowable Subject Matter

8. Claims 25 and 36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. The following is a statement of reasons for the indication of allowable subject matter:

The cited references taken individually or in combination fail to particularly disclose a communication system as claimed comprising “a fourth device provided on the third network, having transmission and reception functions with respect to the third network” operable so that

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“the fourth device transmits packets in response to the packet transmission request received from the third terminal device, to the second terminal device through the third network.” The closest prior art of record, Okada et al. (US 6,484,028) in view of Boer et al. (US 5,706,428), discloses a system for transmitting data from a third device to a first device via a second device. However, the combination fails to disclose that the third device acts as an intermediary device in the transfer of data from a fourth device, which is eventually to be transferred to the first device via a first network.

Conclusion

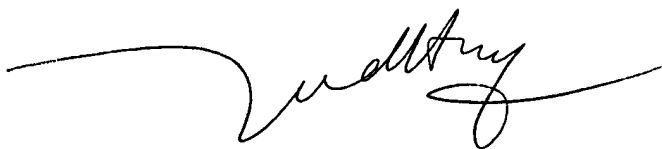
10. Any inquiry concerning this communication, or earlier communications from the examiner should be directed to Thomas Volper whose telephone number is 703-305-8405 and fax number is 703-746-9467. The examiner can normally be reached between 8:30am and 6:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached at 703-308-6602. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Thomas E. Volper



December 22, 2003



HUY D. VU
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